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EXAMINER

REIS, TRAVIS M

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,422

Applicant(s)

BUSCH, DIETER

Examiner

Travis M Reis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002 & 3 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11, 12 and 15 is/are rejected.
- 7) ☒ Claim(s) 8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, i.e. Claims 1-12 & 15 in Paper No. 13 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-6, & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen (U.S. Patent 6196615) in view of Casby et al. (U.S. Patent 6085428).

With reference to claim 4, Lysen discloses a device (1) for measuring and assessing the mutual alignment of bodies, with at least one optical gyro (11) enclosed within a housing (10), with means (12) for transporting and holding in place on a body whose state of alignment is to be determined, and a high-resolution display device (14) for reproduction of alphanumeric or graphic information, using which an operator can recognize whether and in what manner correction measures can be carried out on the articles to be measured (Figures 1 & 2).

With reference to claim 1, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose expressly the device has means for receiving and processing voice commands of an operator and switching the device into an altered machine status based on the voice commands.

Casby et al. discloses a hands free automotive service system which uses voice commands (10) to control the service system and can use voice commands to switch

between modes (col. 5 lines 5-9) (Abstract) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the voice command means disclosed by Casby et al. to the device disclosed by Lysen in order that the device can be controlled without having to disturb its resting area.

With reference to claims 2 & 8, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose expressly the device has speech output means for acoustically providing determined measurement results.

Casby et al. disclose the system includes speech output means (58) for providing data (col. 4 lines 30-33). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the speech output means disclosed by Casby et al. to the device disclosed by Lysen in order that a person would not have to move the device in order to receive the measurement data.

With reference to claim 5 & 6, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose expressly the device is provided with transmission means for wirelessly receiving or exchanging data, commands and other information with an externally arranged control or a higher-level supervisory computer utilizing infrared light and extremely high frequency radio waves as a data carrier.

Casby et al. disclose transmitting means using infrared (16, 22) (col. 3 lines 34-36) and a high-level computer (68) for processing (Figures 1 & 4). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the transmitting and processing means taught by Casby et al. to the device disclosed by Lysen in order that the measurement device could be send the data to other devices for application.

With reference to claim 12, Lysen discloses a process for measuring and assessing the mutual alignment of bodies, comprising the following steps contacting a measurement

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probe with a first body which has a reference surface or edge (col. 4 lines 17-18); contacting the measurement probe with a second body which has a measurement surface or a measurement edge (col. 3 lines 1-10); computing geometrical data which describe the mutual orientation of the bodies in a differential manner; outputting of information which has differences of orientation between the first and the second body (col. 4 lines 24-27), on an optical display basis (14), to an operator (Figure 2).

Lysen does not disclose a speech input means which facilitates structured input of dimension data and commands.

Casby et al. discloses a hands free automotive service system which uses speech input to control the service system (Abstract) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the speech input means disclosed by Casby et al. to the device disclosed by Lysen in order that the device can be controlled without having to disturb its resting area.

4. Claims 2, 3, & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen (U.S. Patent 6196615) in view of Puyo et al. (U.S. Patent 4551921).

With reference to claim 2, Lysen discloses a device for measuring and assessing the mutual alignment of bodies with an optical gyro.

Lysen does not disclose expressly the device has speech output means for acoustically providing determined measurement results.

Puyo et al. discloses an apparatus for measuring the gradient of a surface with a voice generator (10) (col. 3 lines 36-39). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the voice generator disclosed by Puyo to the device disclosed by Lysen in order that a person would not have to move the device in order to receive the measurement data.

With reference to claims 3 & 15, Lysen does not disclose the device has an ergonomically attached individual keys (32) on a handle for actuation by the thumb or forefinger which, when actuated by an operator, causes storage of an individual measured value out of a time-sequential succession of measured values.

Puyo et al. disclose a handle (7) with a key (10) for actuation by the thumb and forefinger which causes storage of an individual measured value (Figure 1).

5. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen & Casby et al. as applied to claims 1, 2, 4-6, & 8 above, and further in view of Rodloff et al. (U.S. Patent 5408751).

Lysen & Casby et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1, 2, 4-6, & 8, but do not disclose expressly the value acquisitions being made in a stochastic, nonperiodic manner.

Rodloff discloses a high resolution gyro system for precise angular measurement in which values are recorded in random points in time (col. 9 line 14-5). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the means disclosed by Rodloff to the device taught by Lysen & Casby et al. in order that the time intervals of the measured value acquisitions are irregularly distributed to prevent value drift error.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen & Casby et al. as applied to claims 1, 2, 4-6, & 8 above, and further in view of Nower (U.S. Patent 5980094).

Lysen & Casby et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1, 2, 4-6, & 8, but do not disclose expressly the externally arranged control or higher level supervisory computer has means for acquiring averaging measured

values at a selected measurement site for ascertaining the spatial orientation of bodies or the device in a time sequential manner with a measurement frequency at which current mechanical acceleration values with comparatively low intensity are represented or assume a minimum value.

Nower discloses an analysis of alignment data wherein the externally arranged control or higher level supervisory computer has means for acquiring averaging measured values at a selected measurement site for ascertaining the spatial orientation of bodies or the device in a time sequential manner with a measurement frequency at which current mechanical acceleration values with comparatively low intensity are represented or assume a minimum value (cols. 3 & 4, lines 49 & 4-12). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the means disclosed by Nower to the computer taught by Lysen & Casby in order for ascertaining the spatial orientation of bodies to know if they are out of alignment.

Allowable Subject Matter

7. Claims 7 & 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

With reference to claim 7, the prior art of record does not disclose or clearly suggest a device with an antenna for transmitting or receiving integrated into a handle of the device, in combination with the remaining limitations in the claims.

With reference to claim 10, the prior art of record does not disclose or clearly suggest a device with computer means for performing an averaging measured value acquisition which

excludes the frequency ranges of a technical line, in combination with the remaining limitations in the claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Levine discloses an apparatus and method for inertial measurement of pipeline deflection (U.S. Patent 4524526). Adolph discloses an axle measuring device and method (U.S. Patent 6435044).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M Reis whose telephone number is (703) 305-4771. The examiner can normally be reached on 8:00--5:00 Monday--Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800

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May 9, 2003